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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,177	10/04/2004	Robert Alexander Howell	BAE 3055	6771

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EXAMINER	
CULBRETH, ERIC D	

ART UNIT	PAPER NUMBER
3616	

MAIL DATE	DELIVERY MODE
09/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/510,177

Applicant(s)

HOWELL ET AL.

Examiner

Eric Culbreth

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 21, 23, and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 21, 23, and 25 recite the limitation "the fully returned flanges" in lines 2-3. There is insufficient antecedent basis for this limitation in the claims. Contrary to applicant's remarks on page 11 filed 6/12/07, claim 3 was not amended to depend from claim 1, so there is still no antecedent basis. Also, amending claim 3 to depend from claim 2 would not provide antecedent basis in claim 23.

Claim Objections

3. The following is a quotation of the 37 CFR 1.75(a):

The specification must conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 8-10 are objected to under 37 CFR 1.75(a), as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In each of claims 8-10 "high quality" welded joint is indefinite because there is no definition in the claims or specification as to what qualifies the joint as "high" quality (i.e., when are the claims infringed).

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-25 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Komiya US4798397 in view of Layman US1380659, both of record.

Komiya discloses a vehicular suspension arm (including control arm 2) comprising a metal component that has a structural I-beam section (best seen in Figure 3; column 2, lines 53-55) and openings (for example, at both ends 2a, 2b) able to accept various other vehicle components. Komiya does not specifically disclose the I-beam shaped vehicular suspension arm being formed from two stamped components.

Layman teaches a link (for example, as seen in Figure 16), comprising:

-Upper sheet metal stamped component (for example, left side component in Figure 16) with a first outer face (for example, left face) and a first inner face (for example, right face), and comprising a first central web portion (for example, vertical portion) with two opposite sides (for example, upper and lower sides of vertical portion) and first upstanding flange portions (for example, horizontal portions at opposite ends of web) at the opposite sides of the first web portion

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-Lower sheet metal stamped component (for example, right side component in Figure 16) with a second outer face (for example, right face) and a second inner face (for example, left face), and comprising a second central web portion (for example, vertical portion) with two opposite sides (for example, upper and lower sides of vertical portion) and second upstanding flange portions (for example, horizontal portions at opposite ends of web) at the opposite sides of the second web portion

-The first and second inner faces able to contact each other along a substantial portion of the first and second web portions (see Figure 16)

-The upper and lower stamped components able to be rigidly attached to each other to create a structural I-beam section (see Figure 16), wherein the thickness of each upstanding flange portion is at least equal to the combined thickness of the first and second web portions (in a similar manner to applicant's claimed invention)

-The upper and lower stamped components are press-formed from sheet metal of uniform thickness (page 1, lines 12-14; Figure 16)

-Each upstanding flange portion comprises a fully returned segment of the sheet metal (in a similar manner to applicant's claimed invention), whereby the thickness of each upstanding flange portion is at least double the thickness of each web portion (see Figure 16)

-The upper stamped component and lower stamped component are press-formed from sheet aluminum, sheet steel, or similar sheet metal materials (though specific sheet metal is not disclosed, "similar sheet metal materials" is sufficiently broad to embody any sheet metal)

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-The upper and lower stamped components are rigidly attached to each other along the first and second inner faces in a back-to-back configuration using bolting, welding, bonding, riveting or similar fastening means (for example, welding and brazing; page 1, lines 49-51, 105-108)

-Gap (for example, as can be seen between the joined inner faces and the joined flanges on opposite ends of the web portions) able to accommodate a welded joint (butt, fillet, or various other welded joints), the upper and lower components rigidly attached to each other by means of the welded joint (page 1, lines 49-51, 105-108; see Figure 16, specific type of weld joint being an obvious matter of design choice)

-Openings (as can be seen in Figures 1-7) able to accept various components

The examiner notes that although reference has been made to the embodiment of Figure 16, other embodiments of the Layman reference may disclose similar features.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the vehicular suspension arm of Komiya such that it comprised sheet metal stamped components as claimed in view of the teachings of Layman so as to provide a link that possesses great strength while being of extremely light weight and inexpensive to produce (Layman, page 1, lines 15-20).

7. Claims 1-25 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Seksaria et al US 20040075234A1 (of record) in view of Layman US1380659.

Seksaria et al disclose a vehicular suspension arm (including control arm 10) comprising an aluminum metal component (for example, including member 14) that has a structural I-beam section (best seen in Figure 4) and openings (for example, within ears 66, 68) able to accept various other vehicle components. Seksaria et al do not specifically the I-beam shaped vehicular suspension arm being formed from two stamped components.

Layman teaches a link, as described above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the vehicular suspension arm of Seksaria et al such that it comprised sheet metal stamped components as claimed in view of the teachings of Layman so as to provide a link that possesses great strength while being of extremely light weight and inexpensive to produce (Layman: page 1, lines 15-20).

Response to Arguments

8. Applicant's arguments filed 6/12/07 have been fully considered but they are not persuasive.

On pages 11-15 of the arguments filed 6/12/07 the applicant argues that Komiya and Seksaria et al do not disclose a vehicular suspension arm formed from two stamped components, and that Layman does not teach that the disclosed link or lever may be used in a vehicular suspension system.

In response to applicant's arguments above against the references individually, one cannot show nonobviousness by attacking references individually where the

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rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Although applicant states on page 12 that Layman discloses a brake rocker shaft as one possible form of the invention, the title of the invention is "Link, Lever and the Like" which would include suspension arms (which is a link) to the skilled artisan. Regarding page 12 to the top of page 13 of the 6/12/07 remarks, where the applicant argues that Figure 16 of Layman is merely a "general indication of a possible structure" with no manufacturing approach, this is not persuasive because Figure 16 of Layman is still a disclosure in the prior art and because method of manufacture is not distinguishing in an article claim (MPEP 2113).

In response to applicant's argument based upon the age of the references (the comment on page 13 of the 6/12/07 remarks that Layman was patented in 1921), contentions that the reference patents are old are not impressive absent a showing that the art tried and failed to solve the same problem notwithstanding its presumed knowledge of the references. See *In re Wright*, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977).

Regarding page 14 of the 6/12/07 remarks that there is no indication that any of Layman's shapes were constructed and that Layman was cited against some later automobile suspension patents that issued, this is not persuasive because Layman's disclosure is still prior art and its patenting is indication of reduction to practice or construction (what would Layman have to do to further "indicate" the shapes were

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constructed?) and because any later patents issued over Layman are presumed to have some structure uniquely claimed over Layman (i.e., these later suspension patents also issued over each other).

Similarly, the patents to Kato, Nakamura, etc. listed on page 14 of the remarks issued for their own reasons. In fact, other suspension patents with applicant's claimed approach may not have issued because they were not found obvious over Layman; no conclusion can be drawn from the lack of a 35 USC 102 rejection of applicant's claims (which is what Kato, Nakamura, etc. would involve if they were suspensions with applicant's claimed approach), as 35 USC 103 exists as a statute.

All the claimed structural elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Culbreth whose telephone number is 571/272-6668. The examiner can normally be reached on Monday-Thursday, 9:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571/272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eric Culbreth
Primary Examiner
Art Unit 3616



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REPLACEMENT SHEET

1/5

Approved
EC 8/29/07

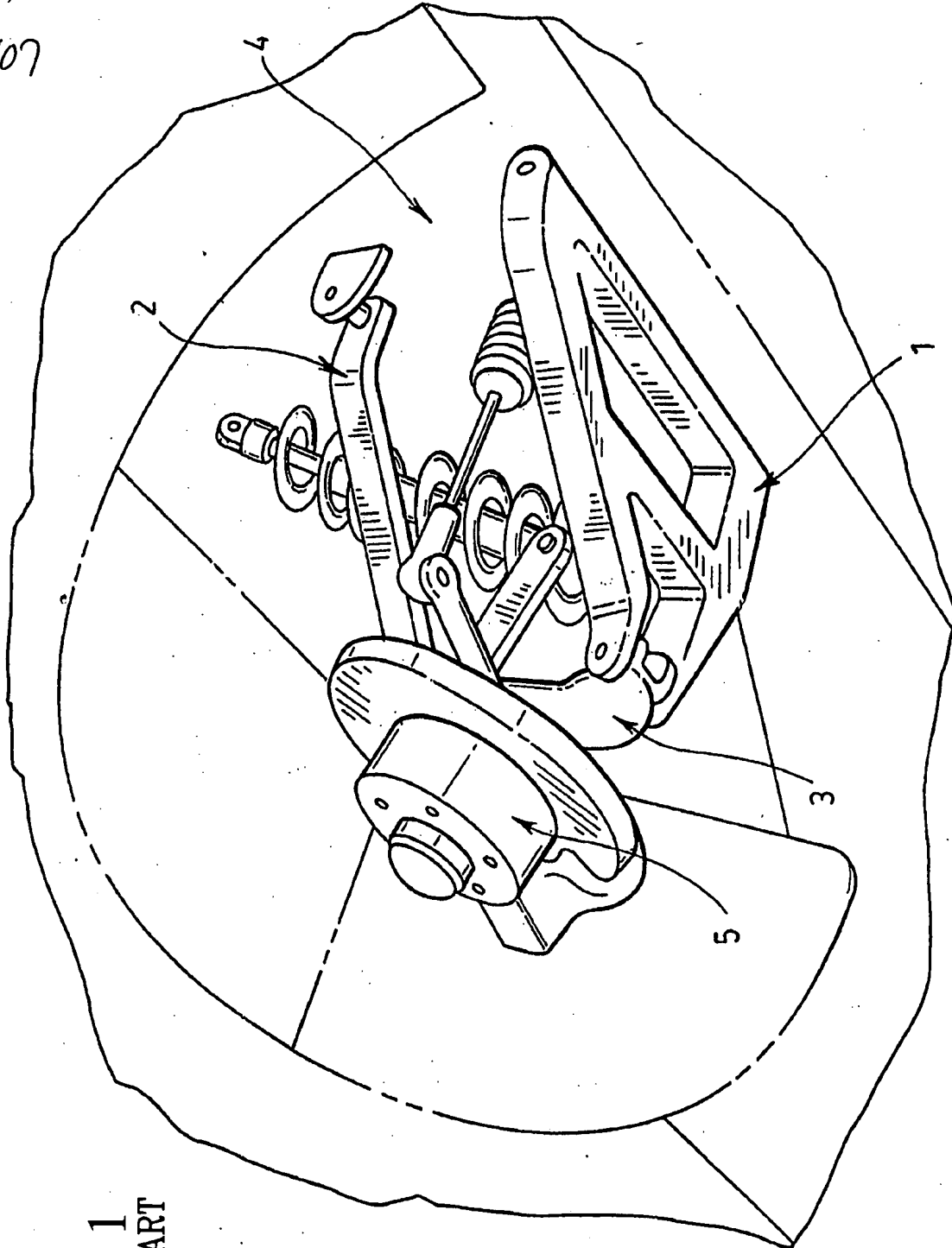


FIG. 1
PRIOR ART